

ABSTRACT OF THE DISCLOSURE

In a gray level image, the direction and the magnitude of a level gradient are found for each of pixels. With respect to the pixel having a level gradient whose magnitude exceeds a predetermined value, a line segment having a predetermined length is drawn in the direction of the level gradient from the pixel or a position spaced apart from the pixel by a predetermined distance. The luminance level of the line segment corresponds to the magnitude of the level gradient. A portion where a lot of line segments are overlapped with one another or a portion where the line segments are concentrated is detected, to recognize the center, the corners, etc. of an object appearing on the image.

15